GUTHRIE *Robert Packer Hospital*

RECEIVED
REGION 1

2002 FEB 21 PM 3:34

NMSB1

February 14, 2002

Ms. Tara Weidner
United States Nuclear Regulatory Commission
Region 1
475 Allendale Rd.
King of Prussia, PA 19406-1415

030-03013

Re: Amendment of Materials License 37-01893-01

Dear Ms. Weidner:

This letter is to request an amendment to our above referenced materials license. We have recently added several radiologists to our medical staff and request the following changes:

- Addition of Jerome Brustein, MD as an authorized user of licensed materials.
- Addition of Harry Cooperman, MD as an authorized user of licensed materials.
- Addition of Ajay Viswambharan, MD as an authorized user of licensed materials.
- Addtion to license for Lanny Chuang, DO, as an authorized user of Iodine 131 for the treatment of hyperthyroidism and cardiac dysfunction.
- Addition of Thomas Padikal, PhD as Medical Physicist.
- Delete Robert Buchanan, M.S. as Medical Physicist.
- Delete Mei-Chang Cheng from our license.

I have attached copies of a materials license for Lanny Chuang, DO demonstrating previous privileges for Iodine 131 use. Additionally, I have attached copies of Board Certificates for Harry Cooperman, MD, Jerome Brustein, MD, and Ajay Viswambharan, MD. I have also attached a C.V. for Thomas Padikal, PhD.

Please note that Dr. Mei-Chang Cheng has not been practicing at our organization since January 21, 2002. Since that time, our radiation therapy practice has been limited to external beam radiation treatments under the supervision of a locum tenens physician. We are currently recruiting to fill our radiation oncologist position and will request an amendment to our license for HDR brachtherapy and seed implants when this position is filled.

All proposed changes to our license have been reviewed by our Radiation Safety Committee. If you have any questions or comments, please do not hesitate to contact me directly at 570-882-5197.

Sincerely,

Jeff B. McBee

Jeff B. McBee
Administrative Director
Robert Packer Hospital
Guthrie Square
Sayre, Pennsylvania 18840
570-888-6666

A member of the Guthrie Healthcare System

131073

NMSS/RGN1 MATERIALS-002

Dr. Chuang

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

PAGE 1 OF 3 PAGES

Amendment No. 13

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Clarion Hospital 2. 1 Hospital Drive Clarion, Pennsylvania 16214	In accordance with the application dated June 17, 1999, 3. License number 37-17215-01 is amended in its entirety to read as follows: 4. Expiration date July 31, 2002 5. Docket No. 030-12379 Reference No.

6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license
A. Any byproduct material identified in 10 CFR 35.100	A. Any radiopharmaceutical identified in 10 CFR 35.100	A. As needed
B. Any byproduct material identified in 10 CFR 35.200	B. Any radiopharmaceutical identified in 10 CFR 35.200 except gas	B. As needed
C. Iodine 131	C. As identified in 10 CFR 35.300	C. 100 millicuries
D. Any byproduct material identified in 10 CFR 31.11	D. Prepackaged Kits	D. As needed

9. Authorized use:

A. Any uptake, dilution and excretion procedure approved in 10 CFR 35.100.
B. Any imaging and localization procedure approved in 10 CFR 35.200.
C. Any radiopharmaceutical therapy procedure approved in 10 CFR 35.300 for which the patient can be released under the provisions of 10 CFR 35.75.
D. In vitro studies.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
37-17215-01

Docket or Reference Number
030-12379

Amendment No. 13

CONDITIONS

10. Licensed material may be used only at the licensee's facilities located at 1 Hospital Drive, Clarion, Pennsylvania.

11. The Radiation Safety Officer for this license is James Puckett, D.O.

12. Licensed material listed in Item 6 above is only authorized for use by, or under the supervision of, the following individuals for the materials and uses indicated:

Authorized Users	Material and Use
James Puckett, D.O.	35.100; 35.200 In vitro studies
Gary F. Haverty, D.O.	35.100; 35.200 In vitro studies
Lanny Chuang, D.O.	35.100; 35.200 Iodine 131 for the treatment of hyperthyroidism and cardiac dysfunction

13. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material to quantities below the minimum limit specified in 10 CFR 30.35(d), 40.36(b), and 70.25(d) for establishing financial assurance for decommissioning.

14. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of licensed material at a single location to quantities below the limits specified in 10 CFR 30.72 which require consideration of the need for an emergency plan for responding to a release of licensed material.

15. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
37-17215-01

Docket or Reference Number
030-12379

Amendment No. 13

16. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below, except for minor changes in the medical use radiation safety procedures as provided in 10 CFR 35.31. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

A. Application dated December 6, 1991
B. Letter dated June 23, 1992
C. Application dated April 18, 1994
D. Letter dated February 2, 1998
E. Letter dated February 20, 1998
F. Letter dated June 17, 1999

UNITED STATES NUCLEAR REGULATORY COMMISSION

For the U.S. Nuclear Regulatory Commission

Date July 21, 1999

By Neelam Bhalla

Neelam Bhalla
Nuclear Materials Safety Branch 1
Division of Nuclear Materials Safety
Region I
King of Prussia, Pennsylvania 19406

95561556

The American Board of Radiology

Organized through the cooperation of the
American College of Radiology, the American Roentgen Ray Society,
the American Radium Society, the Radiological Society of North America,
the Section on Radiology of the American Medical Association,
the American Society for Therapeutic Radiology and Oncology,
and the Association of University Radiologists
Hereby certifies that

Jerome Marc Brustein, M.D.

Has pursued an accepted course of graduate study
and clinical work, has met certain standards and qualifications and
has passed the examinations conducted under the authority of
The American Board of Radiology
On this eighth day of June, 1989
Thereby demonstrating to the satisfaction of the Board
that he is qualified to practice the specialty of

Diagnostic Radiology

THE AMERICAN BOARD OF RADIOLOGY
INCORPORATED
IN THE
DISTRICT
OF
COLUMBIA
1934

Robert G Parker
President

Secretary

AMERICAN BOARD
MEDICAL SPECIALTIES
EXCELLENCE
OPTIMUSQUE

The American Board of Radiology

Organized through the cooperation of the
American College of Radiology, the American Roentgen Ray Society,
the American Radium Society, the Radiological Society of North America,
the Section on Radiology of the American Medical Association,
the American Society for Therapeutic Radiology and Oncology, the Association of
University Radiologists, and American Association of Physicists in Medicine
Hereby certifies that

Ajay Viswambharan, MD

Has pursued an accepted course of graduate study
and clinical work, has met certain standards and qualifications and
has passed the examinations conducted under the authority of
The American Board of Radiology
On this sixth day of November, 2000
Thereby demonstrating to the satisfaction of the Board
that he is qualified to practice the specialty of

Diagnostic Radiology

with Added Qualifications in

Neuroradiology

THE AMERICAN BOARD OF RADIOLOGY · INCORPORATED IN THE DISTRICT OF COLUMBIA · 1934

AMERICAN BOARD OF MEDICAL SPECIALTIES

R.R. Hatten MD
President

Steven A. Leibel, M.D.
Secretary-Treasurer

M. Paul Capp, M.D.
Executive Director

Certificate No. 41794

Valid through 2010

The American Board of Radiology

Organized through the cooperation of the
American College of Radiology, the American Roentgen Ray Society,
the American Radium Society, the Radiological Society of North America,
the Section on Radiology of the American Medical Association
and the American Society of Therapeutic Radiologists
Hereby certifies that

Harry Alan Cooperman, M.D.

Has pursued an accepted course of graduate study
and clinical work, has met certain standards and qualifications and
has passed the examinations conducted under the authority of
The American Board of Radiology
On this sixth day of June, 1965
Thereby demonstrating to the satisfaction of the Board
that he is qualified to practice the specialty of

Diagnostic Radiology

The American Board of Radiology · Incorporated in the District of Columbia · 1934

Thomas N. Padikal, Ph.D.
Diplomate, American Board of Radiology
[redacted]
E-mail: [redacted]

OBJECTIVE

To work as a Medical Physicist with a focus in Radiation Oncology

AREAS OF EXPERTISE

Experimental Physics: Electron Linear Accelerators (up to 25 MeV and 2,000 cGy per minute), 50 MeV Cyclotron, 22 Mev Microtron, Radiation Transport, 3-D Beam Characterization, Interaction of Radiation with Matter, Radiation Dosimetry, Nuclear Magnetic Resonance (up to 1.5 Tesla), NMR Imaging, X-ray imaging including flouro and Computed Tomography, Propagation (near and far field) of Ultrasound, Hyperthermia and Propagation of Microwaves in Tissues, Radiation Safety, Laser Safety, Radiation shielding, Nuclear Physics as applied to radioactivity, Safe handling of radioactive substances of up to several kilo-Curies, Teaching & training, Mossbauer Effect, Quantum Optics, Fourier Optics, gamma imaging.
Radiation Oncology: IMRT (Intensity Modulated Radiation Therapy), HDR (High Dose Rate Brachytherapy) for prostate, breast and other tumors, Prostate Seed Implants, 3D and 2D Treatment Planning, PDT (Photodynamic Therapy), Clinical Physics, Dosimetry, Commissioning, Calibrations and Brachytherapy (HDR & LDR).
Diagnostic Radiology: Computed Tomography, Magnetic Resonance Imaging, Patient Dosimetry.
Nuclear Medicine: Radio-nuclide imaging, in-vivo dosimetry, gamma cameras, spect imaging.
Regulatory: Considered an ***expert*** by the Nuclear Regulatory Commission and by many States.

EXPERIENCE

Physics: Over twenty years of experience with linacs, klystrons, magnetrons, high voltage devices, gamma cameras, radiation detectors, radiation transport, interaction of radiation with matter, radiation oncology, diagnostic radiology, NMR, radiation biology, computer simulation of radiation transport in uniform and non-uniform media
Clinical: *HDR Prostates*: Over 120 cases; *HDR Breast*: Over 20; *LDR Prostate Seed Implants*: Over 100; *LDR Gynecological cases*: Over 2,000; *IMRT Cases*: Over 25; *3D Treatment Planning*: Over 2,000; *PDT*: Over 20
Teaching: Extensive teaching experience in Medical Imaging (CT, MRI, Ultrasound, Radiography & Nuclear Cardiology) Introductory College Physics (e.g. Resnick & Halliday) Radiation Dosimetry / Radiation Transport, Radiation Safety.

CERTIFICATION

Certified by ***The American Board of Radiology*** in Radiation Therapy, Diagnostic Radiology and Nuclear Medicine, 1977.

EDUCATION

Residency	Medical Physics	1975	University of Cincinnati General Hospital
Ph.D.	Physics (*Quantum Optics*)	1975	University of Cincinnati
M.S.	Physics (*High Energy Physics*)	1973	University of Cincinnati
M.S.	Physics (*Nuclear Physics*)	1971	Cleveland State University
M.S.	Electronics	1969	Kerala University
B.S.	Physics, Chemistry, Mathematics	1967	Kerala University

POSITIONS HELD

Consulting Medical Physicist — 1999 - present
Bensalem, Pennsylvania

Medical Physicist — 1995 - 1999
Memorial Medical Center & Cancer Institute, Tulsa, Oklahoma

Director of Physics & COO 1981 – 1995
Applied Physics Services, Inc., Williamsport, Pennsylvania

Senior Physicist 1978 - 1981
National Cancer Institute, National Institutes of Health, Bethesda, Maryland

Assistant Professor of Radiology 1975 - 1978
The George Washington University Medical Center, Washington, D.C.

PUBLICATIONS

A. BOOKS AND CHAPTERS

- *A Physicist's Desk Reference* (1989). American Institute of Physics. Medical Physics section.
- *Medical Physics Data Book* (1982). Published by the American Association of Physicists in Medicine as the National Bureau of Standards Handbook 138.
- *Physics Vade Me Cum* (1983) H.L.Anderson (Chief Editor), Thomas N. Padikal (Editor, Medical Physics). Published by the American Institute of Physics on its fiftieth anniversary.
- Treatment Planning in Primary Breast Cancer (*Radiation Therapy Planning*, N. Bleehen, Editor, Dekker, 1983)
- The Role of Computed Tomography in Treatment Planning (*Radiation Therapy Planning*, *ibid*)

B. PUBLISHED JOURNAL ARTICLES

- Experience with a CT Based Treatment Planning System (Proceedings of the Fourth Annual Symposium on Computer Applications in Medical Care, Nov. 1980, Washington, D.C.)
- Electron Contamination of a High Energy X-ray Beam (Physics in Medicine and Biology, Nov. 1978)
- Determination of the Size Distribution of Human Albumin Microspheres by the Forward Scattering of Monochromatic Light (Medical Physics, Jan 1976)
- Computational Inaccuracy of Irregular Field Dosimetry (Medical Physics, Feb 1978)
- Field Uniformity Correction - Benefits or Pitfalls? (Journal of Nuclear Medicine, July 1976)
- The Need for Treatment Planning Program Verification (Proceedings of the Second Annual Symposium on Computer Applications in Medical Care, 1978)
- A System for Electron Therapy Dosimetry Surveys with Thermoluminiscence Dosimeters (Int J Appl Rad, Vol.33)
- Stability of Teletherapy Beam Symmetry with Gantry Angle (Radiology, May 1981)
- Dose to Lung in Primary Breast Irradiation (Int J Rad Onc Biol Phys, Vol 9, 1983)
- Quantitative Assessment of Field Uniformity for Gamma Cameras (Radiology, Jan. 1976)
- Experience with a Pair of Matched Silicone Diodes for Constancy Checks on Teletherapy Equipment (Radiology, Nov. 1978)
- Utilization of the Computerized Tomography Scanner in Interstitial Dosimetry (Radiology, June 1980)
- The Importance of Correct Photopeak Setting in Nuclear Medicine Imaging Procedures (J Nuclear Medicine Technology, Sept 78)
- The time course of radioprotection by WR 2721 in mouse skin. (Int J Radiat Oncol Biol Phys, 1982)
- A Shared Facility in a Medical Research Institution (J Medical Systems, Vol.2, No.3, 1978)
- Localization in Interstitial Dosimetry Utilizing the CT Scanner (J of Computed Tomography, Vol 3, 1979)
- Liver Size Determination in Pediatrics Using Sonographic and Scintigraphic Techniques (Radiology, Nov. 1975)
- QA in a Mobile CT Operation (Medical Imaging, May 1983)
- The Design and Fabrication of an Automated Real Time Patient Position and Dose Monitoring System (Proceedings of the Fifth International Conference on Medical Physics, Jerusalem, Aug 1979)
- Experience with a Mobile CT Scanner (Proceedings of the World Congress on Medical Physics, Hamburg, 1982)
- On the Use of Transmitted and Scattered Radiation for Monitoring Patient Position and Dose Constancy (Proceedings of the Fifth International Conference on Medical Physics, Jerusalem, Aug. 1979)
- Quality Assurance of Mobile CT scanners (Applied Radiology, Feb 1987)
- A technique for field matching in primary breast irradiation (Int. J. Radiation Oncology, Biol. Phys., Feb 1983)
- An analysis of some dosimetric uncertainties in radiation therapy (Medical Dosimetry, Vol 13, 1988)
- Acceptance Testing of Medical Imaging Equipment: CT and MRI (Applied Radiology, Nov 1991)
- The Role of Computed Tomography in Treatment Planning, Radiation Therapy Planning (N. Bleehen, Editor, Dekker, 1983)

- Treatment Planning in Primary Breast Cancer, Radiation Therapy Planning (N. Bleehen, *ibid*)

C. PUBLISHED ABSTRACTS

- Physical Aspects of Total Skin Electron Irradiation with a Mevatron XII (Medical Physics, Vol 7, July 1980)
- Characterization of the AFRRI Electron Beam for Intraoperative Radiobiology Research (Int J Rad Onc, Vol.5, 1979)
- Tolerance of Canine Anastamoses and Retroperitoneal Structures to Intraoperative Radiation Therapy (Int. J Rad Onc Bio Phys, Vol. 6, 1980)
- Treatment Planning in Breast Irradiation: The Influence of Technique on Lung Dose and Dose to Opposite Breast (Int. J Rad Onc Bio Phys, Vol. 6, 1980)
- Effect of Patient Specific Physical Measurements on Absorbed Dose (Int. J Rad Onc Bio Phys, Vol. 4, 1978)
- The Use of Computerized Tomography in Interstitial Dosimetry (Int. J Rad Onc Bio Phys, Vol. 4, 1978)

PROFESSIONAL SOCIETIES

1. American Association of Physicists in Medicine
2. American College of Medical Physics
3. American College of Radiology
4. American Physical Society
5. American Society of Therapeutic Radiology and Oncology

COMMITTEE ACTIVITIES

1. MRI Site Accreditation Reviewer, American College of Radiology 1998 -
2. Professional Information and Clinical Relations Committee, AAPM, 1986-88
3. Radiation Therapy Committee, Science Council, AAPM, 1979-1983
4. Training of Radiologists Committee, Educational Council, AAPM, 1979-1983
5. Member, Project Advisory Group, Bureau of Radiological Health, HEW, 1977-78
6. Physics Liaison, CALGB, 1976-77
7. Contributor of questions to ABR examinations 1977- 1993
8. Reviewer, Medical Physics, 1978- 1993
9. Rules Committee, AAPM, 1986-1988

SEMINARS AND SHORT COURSES

Faculty, Nuclear Magnetic Resonance Imaging, 1986 - 1996
Faculty, Nuclear Cardiology, 1980 - 1990
Faculty, Computed Tomography Workshop, 1982 - 1996
Numerous other Faculty Assignments for Continuing Education Courses

MISCELLANEOUS

- Trained over 20 Radiology Residents gain certification by American Board of Radiology
- Trained over 5 Physicists in Medical Physics
- Trained & secured NRC license for over 500 Cardiologists in Nuclear Cardiology
- Trained & secured Board certificates for over 500 CT Technologists
- Trained & secured Board certificates for over 100 MRI Technologists
- Advanced Open Water SCUBA diver, certified by PADI
- Instrument Rated Private Pilot, licensed by the FAA
- Volunteer Pilot, Angel Flight (Fly children and adults to distant hospitals for treatment, *gratis*)
- Long Distance Biking, Alpine Skiing, Sailing, Ethnic Cooking, Multi-day backpacking & Hiking

This is to acknowledge the receipt of your letter/application dated

2/14/2000, and to inform you that the initial processing which includes an administrative review has been performed.

☑ AMEND. 37-01893-01
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

☐ Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 131073.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.

NRC FORM 532 (RI)
(6-96)

Sincerely,
Licensing Assistance Team Leader

	:	(FOR LFMS USE)
	:	INFORMATION FROM LTS
BETWEEN:	:	----------
	:	
License Fee Management Branch, ARM	:	Program Code: 02230
and	:	Status Code: 0
Regional Licensing Sections	:	Fee Category: 7C_3M
	:	Exp. Date: 20110930
	:	Fee Comments: CODE 23
	:	Decom Fin Assur Reqd: N
	::	

LICENSE FEE TRANSMITTAL

A. REGION I

1. APPLICATION ATTACHED
   Applicant/Licensee: GUTHRIE HEALTHCARE SYSTEM &
   Received Date: 20020221
   Docket No: 3003013
   Control No.: 131073
   License No.: 37-01893-01
   Action Type: Amendment

2. FEE ATTACHED
   Amount: _____
   Check No.: _____

3. COMMENTS

Signed M. A. Perkins
Date 2/22/2002

B. LICENSE FEE MANAGEMENT BRANCH (Check when milestone 03 is entered /__/)

1. Fee Category and Amount: _____

2. Correct Fee Paid. Application may be processed for:
   Amendment _____
   Renewal _____
   License _____

3. OTHER _____
   _____

Signed _____
Date _____